

It has Spines
Field Program
Visitor Center
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Revised 11/22/99 and 1/10/01

Teacher's Version

- Grade: Kindergarten and First
- Subject: Plants in the Mojave Desert
- Theme: There are a wide variety of plants in the desert. Each plant has special characteristics.
- Goal: Students will become more aware of the variety of plants found in the desert.
- Objectives: Identify and name three common desert plants.
Describe the life cycle of a plant.
- Curriculum: (1)2.1 Observe and compare familiar plants
- Background: The land surface of the Red Rock Canyon National Conservation Area supports a wide variety of plant species. This variety is due to soil types and depth, elevation, exposure, and precipitation, as well as existing and past use patterns.
- An area that supports vegetation and has one or more dominant or co-dominant species is identified as a vegetation type, usually named after the dominant or most abundant species. Vegetation types vary greatly in the number of species, in the percentage of species and in the percentage of each species of the total composition. The vegetation in the area can be divided into nine major vegetation types: pinion juniper, Joshua tree, rabbitbrush, oakbrush, blackbrush, manzanita, desert scrub, unique vegetation, and barren.
- Key Points: In order to grow plants need sun, air, water, food, and space.
Certain parts of a tree have particular jobs.
Parts of plants look different from plant to plant. This enables us to identify different species.
- Vocabulary: Leaves/Spines: Leaves are the food factories of a tree. They convert sunlight, carbon dioxide and water into oxygen and sugar (food!) through the process of photosynthesis.
Roots: A plant's roots help anchor the tree in the ground. They also absorb water and nutrients from the soil.
Stem/Trunk: The trunk provides support for branches, which in turn support the plant's leaves. The trunk has tubes in it the transport water and nutrients to the leaves, and sugar from the leaves to the rest of the plant.
Bark: Bark protects the tree/plant from injury caused by insects and other animals.
Seed: The plant part that sprouts and produces a new plant!
- Activities: Students will be participating in four different activities. Students will be comparing similarities and differences between common desert plants. We will also look at clippings from plants in Red Rock and compare the leaves and adaptations of each plant.

Pre-Site Activity:

What plants do you have around your school?

What plants do you have at your house?

Have the students count the kinds of plants found at each site. They can also draw pictures of the plants they find. The goal of this activity is to begin an awareness of the differences between different plants.

Conclusion:

Plants have many similarities as well as major differences. A variety of vegetation types have adapted and survive in the Mojave desert and Red Rock Canyon.

Joshua Tree Seeds

Instructions for planting:

Outdoors: (Plant during warm summer months) Place seeds into soil, cover with 1/8 inch sand. Keep moist but not wet until seed sprouts. Germination time 10 to 20 days.

Indoors: (Plant anytime of the year) Fill container with damp soil or potting medium. Place seeds in soil, cover with 1/8 inch sand. Place in a warm spot (80-90 degrees) with good light. Keep moist but not wet until seed sprouts. Germination time 10-20 days.